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Notice of Allowability	Application No.	Applicant(s)	
	10/798,435	TSUKAGOSHI, SHINSUKE	
	Examiner	Art Unit	
	Krystyna Suchecki	2882	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to _____.
2. ☒ The allowed claim(s) is/are 1-24.
3. ☒ The drawings filed on 12 March 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

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|---|--|
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>03/12/04; 08/19/04</u> 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ 7. <input type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____ |
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DETAILED ACTION

Allowable Subject Matter

1. Claims 1-24 are allowed.
2. The following is an examiner's statement of reasons for allowance: Claims 1 and 13 contain allowable subject matter for at least the reason that the prior art of record fails to teach or fairly suggest an X-ray computed tomographic apparatus or method for X-ray computed tomography comprising a display portion with a quadrilateral frame line specifying a reconstruction range, an input portion to input a command to transform the frame line specifying said reconstruction range to a parallelogram or rotate the frame line specifying said reconstruction range, a scan portion to scan in a scan range corresponding to said reconstruction range and a reconstruction portion for reconstructing data acquired by said scanning as claimed. While Adobe Photoshop 3.01, Tsuyuki (US 5,651,043; Column 18, lines 48-53) and Shinohara (US 6,188,744; Column 5, lines 36-45) teach the specification of a region of interest via a frame line, but the references fail to teach a scan of the region of interest corresponding to a parallelogram or rotated frame line combined with a reconstruction. Adobe Photoshop 3.01 specifies an imaging range, but can only resample data already present: new data is not scanned as a result of the specified range. Tsuyuki additionally teaches that the region of interest specified on a scanogram is scanned and reconstructed, but the frame line used to designate the region of interest is not transformed or rotated (Column 35, line 13- Column 36, line 22). Shinohara scans more than the region of interest and displays the data real-time without a reconstruction (Column 7, lines 23-61); therefor, the parallelogram does not assist with the specification of a reconstruction range. Chang (US 6,195,409) teaches image rotation (Column 5,

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lines 40-44) to align with a template so that the template can be selected for patient scanning (Column 6, lines 9-28). Since the template is selected for scanning, a frame line is not specified nor manipulated for determining a reconstruction range. Kisinger (US 6,185,271) teaches the general notion of selecting a region of interest for optimal scanning, but silent as to frame line selection, transformation or rotation (Column 3). Gordon (US 5,796,802) likewise teaches a preliminary scan to find a region of interest, but does not specify frame line selection, transformation or rotation. Rescan areas are implicitly automatically selected by the system. Sakurada teaches a CT system where a region of interest is selected on a first image and is used to influence a second CT scan. The region of interest frame line is not transformed or rotated.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krystyna Suchecki whose telephone number is (571) 272-2495. The examiner can normally be reached on M-F, 9-5.


5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Glick can be reached on (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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DAVID V. BRUCE
PRIMARY EXAMINER